

2 > : 0 4 > - Persea americana

gradinar, A J 1 > B 0 05 N ; 8 2008 - 16:45:04

2 > : 0 4 > B > e @ 0 A B 5 = 8 5 > B A 5 < 5 9 A B 2 > ; 0 2 @ > 2 8 . @ > 8 7 E > 6 4 0
 > B & 5 = B @ 0 ; = 0 < 5 @ 8 : 0 8 5 ? > 7 = 0 B > > 1 5 ? @ 5 4 8 8 0 0 0 3 . = 0
 0 F B 5 : 8 B 5 8 < 0 8 B 5 . 0 7 2 0 = 8 5 B > < C (ahuacatl) 8 4 2 0 > B 5 7 8 : 0
 = 0 E C 0 B J ; , : > 5 B > 2 ? @ 5 2 > 4 > 7 = 0 G 0 2 0 B 5 A B 8 A 8 ? > @ 0 4 8
 ? @ 8 ; 8 : 0 B 0 = 0 ? ; > 4 0 A B > 7 8 0 = 0 B > < 8 G 5 = > @ 3 0 = . 0 A B 5 = 8 5 B >
 5 4 > = 5 A 5 = > 2 2 @ > ? 0 > B 8 A ? 0 = F 8 B 5 ? @ 5 7 1 7 2 . = 5 A
 = 0 9 - 3 > ; 5 < 8 B 5 ? @ > 8 7 2 > 4 8 B 5 ; 8 = 0 0 2 > : 0 4 > A 0 5 : A 8 : > ,
 = 4 > = 5 7 8 O , !) , @ 0 7 8 ; 8 O 8 > ; C < 1 8 O . > ; 5 < 8 ? ; 0 = B 0 F 8 8 A
 0 2 > : 0 4 > 8 < 0 8 2 2 @ > ? 0 - 2 A ? 0 = 8 O 8 = 0 > @ A 8 : 0 .
 : > 2 @ > 4 = 0 B 0 A 8 < 5 @ 8 : 0 0 2 > : 0 4 > B > 5 ? ; > 4 > @ > 4 = > 4 J @ 2 >
 A 2 8 A > G 8 = 0 4 > 2 0 < , 2 A 0 : A 8 O B > 5 ? @ 8 2 ; 5 : 0 B 5 ; 5 = E @ 0 A B A 5 4 @ 8
 ; 8 A B 0 8 4 0 ; 5 G ? > - A : @ > < = 8 @ 0 7 < 5 @ 8 . " > 2 0 @ 0 A B 5 = 8 5 @ 0 4 : > A 5
 ? @ 5 4 ; 0 3 0 ? > < 0 3 0 7 8 = 8 B 5 , = > ; 5 A = > < > 6 5 B 5 4 0 3 >
 > B 3 ; 5 4 0 B 5 A 0 < 8 .
 ! > @ B > 2 5 B 5 A 5 4 5 ; O B = 0 B @ 8 3 5 > 3 @ 0 D A : 8 3 @ C ? 8 :

1. = B 8 ; A : 0 3 @ C ? 0 (B @ > ? 8 G 5 A : 0) ? @ > 8 7 E > 6 4 0 > B B @ > ? 8 G 5 A : 8
 = 8 7 : 8 > 1 ; 0 A B 8 (4 > 8 0 0 < = 0 4 < > @ A : > B > @ 0 2 = 8 1 5) . 0 ? @ 8 < 5 @ ,
 : J < B 0 7 8 3 @ C ? 0 A 5 > B = 0 A O B A > @ B > 2 5 « 0 ; 4 8 = » , « ! 8 < > = 4 A » 8
 « ' 5 @ 5 = ? @ 8 = F » (Waldin, Simmonds, Black Prince). " 5 A 0 G C 2 A B 2 8 B 5 ; = 8 : J <
 A B C 4 0 . ; > 4 > 2 5 B 5 B 5 6 0 B 0 , 4 1 , 5 : 3 .
2. 2 0 B 5 < 0 ; A : 0 (? > ; C B @ > ? 8 G 5 A : 0) ? @ > 8 7 E > 6 4 0 > B
 B @ > ? 8 G 5 A : 8 3 > @ = 8 > 1 ; 0 A B 8 (8 0 0 2 8 0 0 < = 0 4 < > @ A : > B >
 @ 0 2 = 8 1 5) . " 8 ? 8 G = 8 B 5 ? @ 5 4 A B 0 2 8 B 5 ; 8 = 0 4 0 4 5 = 0 3 @ C ? 0 A 5
 O 2 O 2 0 B A > @ B > 2 5 « 5 < 8 : » 8 « 0 A A » (Bemik, Hass). 0 : @ 0 B : > B 5
 8 7 4 J @ 6 0 B ? > = 8 6 0 2 0 = 5 = 0 B 5 < ? 5 @ 0 B C @ 0 B 0 4 > 0 C ° . ; > 4 > 2 5 B 5
 B 5 6 0 B 0 , 5 1 , 5 : 3 .
3. 5 : A 8 : 0 = A : 0 (A C 1 B @ > ? 8 G 5 A : 0) ? @ > 8 7 E > 6 4 0 > B
 A C 1 B @ > ? 8 G 5 A : 8 > 1 ; 0 A B 8 = 0 5 : A 8 : > . " > 2 0 A 0 A > @ B > 2 5 ,
 = 0 9 - 8 7 4 @ J 6 ; 8 2 8 = 0 = 8 7 : 8 B 5 B 5 < ? 5 @ 0 B C @ 8 (" 5 8 7 4 J @ 6 0 B 1 5 7 4 0
 A 5 ? > 2 @ 5 4 O B 7 0 : @ 0 B : > B 5 < ? 5 @ 0 B C @ 0 > : > ; > 4 C °) . ! > @ B > 2 5 B 5
 = 0 B 0 7 8 3 @ C ? 0 A 5 > B 3 ; 5 6 4 0 B = 0 9 - < = > 3 > . 0 ? @ 8 < 5 @ , : J < B 0 7 8
 3 @ C ? 0 A 5 > B = 0 A O B A > @ B > 2 5 « > B D @ 8 4 » 8 « 5 @ = > 4 » (Gottfried, Pernod).
 ; > 4 > 2 5 B 5 A 0 ? > - < 0 ; : 8 (4 > 2 5 0 3) .

J @ 2 > B > 2 8 @ 5 5 2 J 2 2 ; 0 6 = 8 B @ > ? 8 G 5 A : 8 3 > @ 8 8 4 > A B 8 3 0
 2 8 A > G 8 = 0 > B > : > ; > 1 5 < . ; > 4 J B > 1 8 : = > 2 5 = > B 5 6 8 > : > ; >
 1 5 0 - 2 5 0 3 , = > 8 < 0 8 A > @ B > 2 5 A ? > - 5 4 @ 8 ? ; > 4 > 2 5 (> : > ; > 1 : 3) , 0
 A J I > 8 < 8 = 8 0 B N @ = 8 @ 0 7 = > 2 8 4 = > A B 8 . & 2 5 B J B 5 7 5 ; 5 = 8 ; 8

:0DO2>-75;5=. JB@5H=>ABB0 AJ4J@60 54=0 A5<:0, => G5AB>
A5 1J@:0 A :>AB8;:0 ?>@048 3>;5<8=0B0 8 . ;>4JB C7@O20
5420 A;54 :0B> 1J45 >B:JA=0B >B 4J@2>B>.

B45;5B5 :>AB8;:0B0 >B ?;>40, ?>G8AB5B5 O >B 2A8G:8
>AB0BJF8. !530 8420 A;>6=>B> B@O120 40 ?@>185B53-4 4C?:8
2 :>AB8;:0B0 ?> >18:>;:0B0 9, 70 40 <CH=5B5 2JB@5
2@JEG5B0B0 =0 ;:5G:8 70 7J18, A :>8B> 15 70:@5?8B5
:>AB8;:0B0 =04 1C@:0=G5 A 2>40. 0>AB@5=0B0 G0AB B@O120
40 5 >B3>@5, 0 ?;>A:0B0 5420 40 4>:>A20 2>40B0. >30B>
1C@:0=G5B> A5 70?J;=8 A :>@5=8, 70A045B5 <;04>B>
@0AB5=85 2 A0:A8O A B;JAB0 3@048=A:0 ?>G20 A 4>102:0 =0
3;8=0, B0:0 G5 ?>=5 ?>;>28=0B0 :>AB8;:0 40 >AB0=5
=02J=.

>;8209B5 >18;=> 8 >@>AO209B5 G5AB> ?@57 B>?;8B5
<5A5F8. ">@5B5 =0 425 A54<8F8. 5=78@09B5 ;;>=:8B5 =0
<;048O 5:75<?;O@, 70 40 ?>>I@8B5 @07:;>=O20=5B> <C.
@57 78<0B0 3> <5AB5B5 =0 E;04=> 4>10-15 !, >AB02O9B5
?>G20B0 40 70AJE=5 <564C ?>;820=8OB0. :> 5 =0 B>?;>;>
<>65 40 703C18 2A8G:8B5 A 8 ;8AB0. !?@5B5 B>@5=5B>, 70 40 <C
4045B5 ?>:>9.

!;54 :0B> A5 ?@8E20=5, =0<5@5B5 =0 02>:04>B> A;J=G52>
<OAB> 2 AB0OB0 8;8 =02J=.

@8;>65=8O:

" >7=0B8 A0 >:>;>500 2840 02>:04>, :>8B> ?@>87E>640B >B
B@8 @07=>284=>AB8: <5:A8:0=A:>, 320B5<0;A:> 8
70?04=>-8=489A:>.

" 2>:04>B> A5 O45 AC@>2>, BJ9 :0B> ?@8 B>?;8=0
>1@01>B:0 02>:04>B> 70?>G20 40 3>@G8.

" J?@5:8 B>20 A5 87?>;720 :0B> 30@=8BC@0 =0 ?5G5=>
3>2564>, =0 ?5G5=8 15;8 <5A0 8;8 =0 ?B8G5 <5A>.

" ?8B09B5 02>:04> :0B> 45A5@B 8;8 A>A.

" B :>AB8;:0 <>65B5 40 A5 A4>185B5 A :@0A82> 75;5=>
@0AB5=85, :>5B> <=>3> 1J@7> A5 ?@52@J10 2 4@J2G5.
J7<>6=> 5 40 5 70A048 8 2 3@048=0B0- =0 7025B, :0B> ?@57
78<0B0 3> >1289B5 AJA A;0<0.

" 2>:04>B> <>65 40 1J45 87?>;720=> 8 :0B> A@54AB2> 70
@07:@0AO20=5. ;>4JB B@048F8>=> A5 87?>;720 >B 65=8B5
2 5:A8:> 8 @87>=0 :0B> :>7<5B8G=> <0A;>, :>5B> ;5:>
?@>=8:20 2 :>60B0 8 O >A256020.

B3;5640=5:

C;B828@0=5:
 2>:04>B> 5 :C;B828@0=> 2 5:A8:> >B 0FB5:8B5 >I5 ? @ 57
 B@5B>B> E8;O4>;5B85 ?@. . . 4=5H=> 2@5<5
 =09-8725AB=8OB A>@B 02>:04> 5 Persea americana (P. gratissima Gaertn.).
 @><8H;5=>B> :C;B828@0=5 =0 02>:04> 5 70?>G=0;> 2
 \$;>@840(!)) ?@571856 3. 09-3>;5<8O ?@>872>48B5; 2
 A25B>25=<0I01 =0 02>:04> 5 5:A8:>. <><5=B0
 AJI5AB2C20B >:>;>400 A>@B0 02>:04>, >B <0;:8 A @07<5@ =0
 A;820 4> 3>;5<8, 4>AB830I8 4>1 :3., =O:>9 >B BOE A0 A25B;>
 75;5=8=0 F2OB, 4 @C38 4> BJ<=>28>;5B>28, A @07;8G=8
 D>@<8=0 ?;>40, >B O1J;:>284=8 B> B0:820 A D>@<0=0
 :@CH0. >2J@E=>AB0 =0 02>:04>B> <>65 40 1J45 >B
 >3;540;=> 3;04:0 4> A8;=> =0<0G:0=0.

B3;5640=5 2 4><0H=8 CA;>280:

OB> @0AB5=85 <=>3> @O4:> I5 A@5I=5B5 02>:04>B> 2
 =O:>9 F25B0@A:8 <03078=, ?>@048 B078 ?@8G8=0 ?>25G5B>
 ;N18B5;8 3> >B3;5640B >B :>AB8;:0. 2>:04>B> A5 GC2AB20
 4>1@5=0 A25B;>, A;J=G52> <OAB>, :>5B> 5 70I8B5=> >B
 25B@>25. :> 8<0 4>AB0BJG=> ?@>AB@0=AB2> 8 4>1 @0
 >A25B5=>AB, <>65 CA?5H=> 40 A5 >B3;5640 :0B>
 45:>@0B82=> AB09=> @0AB5=85, => 157 40 FJDB8 2 4><0H=8
 CA;>280 B>20 5 ?>GB8 =5?>AB868<>. 2>:04>B> @0AB5
 1J@7>, 4>1@5 5 A0:A8OB0, 2 :>OB> 5 70A045=> 40 5 A ?>-3>;O<
 @07<5@, BJ9 :0B> @072820 3>;O<0 :>@5=>20B0 A8AB5<0.

"5<?5@0BC@0:

OB>B>22-28°!, ?@57 78<0B0 =5 ?>=8A:0 >B16-18°!. :>
 B5<?5@0BC@8B5 ?04=0B >:>;>12 °!, ;8AB0B0 =0 02>:04>B>
 I5 >?040B.
 >;820=5: @57 ;OB>B> ?>;820<5 >18;=>, 157 40
 87G0:20<5 3>@=8O A;>9 =0 AC1AB@0B0 40 70AJE=5, ?@57
 78<0B0 =0<0;O20<5 >15<0 =0 2>40B0 8 A5 4>?CA:0B
 :@0B:>B@09=8(4> A54<8F0) 70ACH020=8O =0 ?>2J@E=>AB0
 =0 ?>G20B0.

;06=>AB:

OB> 2AO:> B@>?8G5A:> @0AB5=85, 02>:04>B> >18G0
 28A>:0B0 2J74CH=0 2;06=>AB, @57 >B>?;8B5;=8O A57>=
 (78<0B0) 5 4>1 @5 40 A5 >?@JA:20B 548=-420 ?JB8 =0 45=
 ;8AB0B0 A 2>40 AJA AB09=0 B5<?5@0BC@0.

>4E@0=20=5:

?5@8>40 =0 2535B0F8O(?@>;5B-;OB>) ?>4E@0=20<5
 254=J6 =0 425 A54<8F8 A <8=5@0;=8 8 >@30=8G=8 B>@>25.
 @57 78<0B0(?5@8>4 =0 ?>:>9) =5 A5 B>@8.

>4@O720=5:

@57?@>;5BB0>D>@<O<5:>@>=0B0,:0B>70A3JABO20=5B>
8<>6540>BGC?8<<;048B52@JEG5B0.

5@8>4=0?>:>9:

B>:B><2@84><0@B. ?B8<0;=8B5<?5@0BC@818-20°!,
?>;820<5C<5@5=>, =5>1E>48<>54>1@>>A25B;5=85.

@5A0640=5:

@57?@>;5BB0<;048B5@0AB5=8O A5?@5A0640B5653>4=>,
2J7@0AB=8B5A0<>?>=5>1E>48<>AB,8;8=02-33>48=8.

>G20:

>1@54@5=8@0=0,1>30B0=0EC<CA,A<5A>B;8AB>2:0,B>@D,
?OAJ:1:1:1. 04J=>B>=0AJ40A5?>AB02O A;>9:5@0<78B70
4@5=06.

07<=>6020=5 <5B>48:

!JA A5<5=0:

>AB8;;8B5=0=54>C7@5;8B5?;>4>25=5?>=8:20B.

AC1AB@0B:

0@07<=>6020=55=5>1E>48<>A5<5=0B040A0?@5A=8.
!C1AB@0B0,:>9B>A5?>;7205>B@02=8G0AB8;8AB>2:0,B>@D
8?OAJ,:>AB8;;0B0A5?>AB02O B0:0,G5>AB@0B02@JE=0G0AB
405=03>@58=0=82>B>=0AC1AB@0B0. B3>@5A5?>:@820A
?@>7@0G5=AJ48;8?>;85B8;5=>2?;8:. >AB02O A5=0
A25B;><5AB>,157?@O:>A;J=G52>>3@O20=5. >44J@60A5
?>AB>O==0B5<?5@0BC@0=5?>=8A:0>B21°C,?5@8>48G5A:8
A5>?@JA:20AC1AB@0B08A5?@>25B@O20. >30B>?>:0@0B
?>=8F8(B>20<>6540>B=5<5>:>;>H5AB<5A5F0),A5
>B:@820,?>AB02O A5=0?>-A25B;>,=>=58=0?@O:0
A;J=G520A25B;8=0. >30B>C:@5?>=54>AB0BJG=>A5
?8:8@028=48284C0;=0A0:A8O.

J22>40:

>480<5BJ@0=0A@540B0=0:>AB8;;0B0A5?@>1820BG5B8@8
<0;;84C?G8F8,@07?>;>65=8=0903@04CA0,2=8<0B5;=>,70
40=5A5=0@0=8O4:0B0. 4C?G8F8B5A5?>AB02OBG5B8@8
::5G:8707J18,:>B>A;C60B70>?>@0.&O;0B0
:>=AB@C:F8O A5?>AB02O2J@ECG0H0A2>40,B0:0G5
2>40B040?>:@8204>;=0B0G0AB=0:>AB8;;0B0. 82>B>=0
2>40B0B@O12040A5?>44J@60?>AB>O==. 030B>A5?>O2OB
4>AB0BJG=>:>@5=8,<>65<40?>A048<A5<5=0G5B>
=0?@02>2A0:A8O. >65AJI>?J@2>=0G0;=>40A5?>AB028
2J22;065=?0<C:8:>30B>:>AB8;;0B0A5@0745;8=0425,40
A5?@5<5AB82A0:A8O. !;54A54<8F0-425I5A5?>O288

:J;=G5B>.

'@57@57=8F8:

5 A5 @07<=>6020 G@57@57=8F8, BJ9 :0B> B@C4=> A5
2:>@5=O20B. @854=>3>48H=8B5 @57=8F8 =5 ?>25G5 >B6%
2:>@5=O5<>AB, 0 ?@842C3>48H=8B5 4>20%.

1;03>@>4O20=5:

1;03>@>4O20=5 A5 ?@028 ?@572B>@0B0 ?>;>28=0=0
;OB>B>, >BA?O10 ?J?:08;8=0?@>;5B, =087@0AB=0;8
42C3>48H=8 @0AB5=8O A480<5BJ@=0AB51;>B>0,7 1A<.
0AB5=8OB0, @07<=>65=8>BA5<5=0 FJDBOB=0 H5AB0B0
>A<03>48=0, 0 ?@8A045=8B5 =0B@5B08;8G5B2J@B0
3>48=0.

@>1;5<8 ?@8>B3;5640=5B>:

@54@07?>;>65=>5 :J<10:B5@80;=8, 28@CA=883J18G=8
701>;O20=8O.
8AB0B0 :0D5=5OB ?J@2> :@09G5B0B0, 02 ?>A;54AB2858
F5;8B5 ;8AB0 ?>:0D5=O20B8 ?>0420B. @8G8=0 <>65401J45
ACE8O2J74CE, ?@5778<=8O ?5@8>4 :>30B> >B>;O20<5
?><5I5=8OB0A5 ?>@JA:20 @54>2=> A2>40AJAAB09=0
B5<?5@0BC@0. !8<?B><0B8:0B05AJI0B0 ?@8
=54>AB0BJG=> ?>;820=5.
8AB0B06J;B5OB8 ?>0420B: @8G8=0 <>65405G5@25=>B>
?0OG58;84@C380:0@8.
8AB0B0871;54=O20B83C1OB>:@0A:0B0A8. @8G8=0 <>6540
1J45=54>AB0BJG=0B0>A25B5=>AB. :> @0AB5=85B>4J;3>
2@5<5518;>70A5=G5=>, B@O12040A50;8<0B878@0
?>AB5?5==> :J<48@5:B=0B0A;J=G520A25B;8=0. @57
78<0B0565;0B5;=>4>>A25BO20=5A ;C<8=8AF5=B=0
;0<?0.

@548B5;8:

)8B>=>A=02JH:0,0:0@8.